

I hereby certify that this correspondence is being filed via  
EFS-Web with the United States Patent and Trademark Office  
on April 13, 2007

PATENT  
Attorney Docket No.: 018563-003410US  
Client Reference No.: 9024.ALG.X1X1

TOWNSEND and TOWNSEND and CREW LLP

By: 

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

SERGEY NIKOLSKIY et al.

Application No.: 10/888,261

Filed: June 21, 2001

For: EFFICIENT DATA  
REPRESENTATION OF TEETH  
MODEL

Confirmation No.: 9129

Examiner: Ayal I. Sharon

Art Unit: 2123

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER  
37 CFR §1.97 and §1.98

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner.

Copies of the references, in compliance with the requirements of 37 CFR §1.98(a)(2), are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Date: \_\_\_\_\_

4/13/2007



Michael T. Rosato  
Reg. No. 52,182

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 206-467-9600  
Fax: 206-623-6793  
MTR:jms

Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/888,261
		Filing Date	June 21, 2001
		First Named Inventor	NIKOLSKIY, SERGEY
		Art Unit	2123
		Examiner Name	Ayal I. Sharon
Sheet 1	of 7	Attorney Docket Number	018563-003410US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-3,407,500	10-29-1968	Kesling	
	AB	US-3,600,808	08-24-1971	Reeve	
	AC	US-3,883,502	08-15-1972	Wallshain	
	AD	US-3,738,005	06-12-1973	Cohen	
	AE	US-3,922,788	12-02-1975	Lavin	
	AF	US-3,983,628	10-05-1978	Acevedo	
	AG	US-4,253,838	03-03-1981	Colos et al.	
	AH	US-4,324,547	04-13-1982	Arcan et al.	
	AI	US-4,500,294	02-19-1985	Lewis	
	AJ	US-4,526,540	07-02-1985	Dellinger	
	AK	US-4,575,330	03-11-1988	Hull	
	AL	US-4,591,341	05-27-1986	Andrews	
	AM	US-4,809,349	09-02-1986	Cain	
	AN	US-4,664,826	05-12-1987	Kesling	
	AO	US-4,676,747	06-30-1987	Kesling	
	AP	US-4,836,778	06-06-1989	Baumrind et al.	
	AQ	US-4,850,865	07-25-1989	Napolitano	
	AR	US-4,877,398	10-31-1989	Kesling	
	AS	US-4,880,380	11-14-1989	Martz	
	AT	US-4,889,238	12-26-1989	Batchelor	
	AU	US-4,890,808	01-02-1990	Steer	
	AV	US-4,935,635	06-19-1990	O'Hara	
	AW	US-4,941,826	07-17-1990	Loran et al.	
	AX	US-4,983,334	01-08-1991	Adell	
	AY	US-5,125,832	08-30-1992	Kesling	
	AZ	US-5,130,064	07-14-1992	Smalley	
	BA	US-5,145,364	09-08-1992	Martz et al.	
	BB	US-5,178,517	01-05-1993	Truax	
	BC	US-5,328,362	07-12-1994	Watson et al.	
	BD	US-5,440,326	08-08-1995	Quinn	
	BE	US-5,528,735	08-18-1998	Stresnick et al.	
	BF	US-5,562,448	10-08-1996	Mushabec	
	BG	US-5,614,075	03-25-1997	Andre	
	BH	US-5,621,648	04-15-1997	Crump	
	BI	US-5,645,420	07-08-1997	Bergersen	

Examiner Signature	Date Considered
--------------------	-----------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet **2**of **7****Complete if Known**

Application Number	09/888,261
Filing Date	June 21, 2001
First Named Inventor	NIKOLSKIY, SERGEY
Art Unit	2123
Examiner Name	Ayal I. Sharon
Attorney Docket Number	018563-003410US

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	BJ	US-5,692,894	12-02-1997	Schwarz et al.	
	BK	US-5,725,378	03-10-1998	Poirier	
	BL	US-5,725,378	03-10-1998	Wang	
	BM	US-5,742,700	04-21-1998	Yoon et al.	
	BN	US-5,799,100	08-25-1998	Clarke et al.	
	BO	US-5,800,174	09-01-1998	Andersson	
	BP	US-5,823,778	10-20-1998	Schmitt et al.	
	BQ	US-5,848,115	12-08-1998	Little et al.	
	BR	US-5,857,853	01-12-1999	van Nifterick et al.	
	BS	US-5,866,068	02-02-1999	Batchelder et al.	
	BT	US-5,879,158	03-08-1999	Doyle et al.	
	BU	US-5,880,961	03-09-1999	Crump	
	BV	US-5,880,962	03-09-1999	Andersson et al.	
	BW	US-5,934,288	08-10-1999	Avila et al.	
	BX	US-5,957,886	09-28-1999	Anthony	
	BY	US-5,964,587	10-12-1999	Sato	
	BZ	US-5,971,754	10-28-1999	Sondhi et al.	
	CA	US-3,082,881	05-18-2000	Andersson	
	CB	US-6,068,482	05-30-2000	Snow	
	CC	US-6,099,314	08-08-2000	Kopelman et al.	
	CD	US-6,123,544	09-26-2000	Cleary	
	CE	US-6,152,731	11-28-2000	Jordan et al.	
	CF	US-6,183,248	02-06-2001	Chisti et al.	
	CG	US-6,190,165	02-20-2001	Andreiko et al.	
	CH	US-6,217,325	04-17-2001	Chisti et al.	
	CI	US-6,309,215	10-30-2001	Phan et al.	
	CJ	US-6,322,359	11-27-2001	Jordan et al.	
	CK	US-6,382,975	05-07-2002	Poirier	
	CL	US-6,398,548	06-04-2002	Muhammad et al.	
	CM	US-6,402,707	06-11-2002	Ernst	
	CN	US-6,482,298	11-19-2002	Bhatnagar	
	CO	US-6,524,101	02-25-2003	Phan et al.	
	CP	US-6,554,811	04-29-2003	Chishti et al.	
	CQ	US-6,572,372	06-03-2003	Phan et al.	
	CR	US-6,629,840	10-07-2003	Chishti et al.	

Examiner Signature	Date Considered
-----------------------	--------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04 <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	09/888,261
		Filing Date	June 21, 2001
		First Named Inventor	NIKOLSKIY, SERGEY
		Art Unit	2123
		Examiner Name	Ayal I. Sharon
Sheet 4	of 7	Attorney Docket Number	018563-003410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	DN	ALCANIZ, et al., "An Advanced System for the Simulation and Planning of Orthodontic Treatments," Karl Heinz Hohne and Ron Kikinis (eds.), <i>Visualization in Biomedical Computing, 4th Int'l. Conf., VBC '96, Hamburg, Germany</i> , September 22-25, 1996, Springer-Verlag, pp. 511-520.	<input type="checkbox"/>
	DO	"Important Tip About Wearing the Red White & Blue Active Clear Retainer System," Allesee Orthodontic Appliances-Pro Lab, 1 page.	<input type="checkbox"/>
	DP	"The Choice Is Clear: Red, White & Blue . . . The Simple, Affordable, No-Braces Treatment," Allesee Orthodontic Appliances-Pro Lab product information for doctors, < <a href="http://ormco.com/aoa/applianceservices/RWB/doctor.html">http://ormco.com/aoa/applianceservices/RWB/doctor.html</a> >, 5 pages (May 19, 2003).	<input type="checkbox"/>
	DQ	"The Choice is Clear: Red, White & Blue . . . The Simple, Affordable, No-Braces Treatment," Allesee Orthodontic Appliances-Pro Lab product information for patients, < <a href="http://ormco.com/aoa/applianceservices/RWB/patients.html">http://ormco.com/aoa/applianceservices/RWB/patients.html</a> >, 2 pages (May 19, 2003).	<input type="checkbox"/>
	DR	"The Choice Is Clear: Red, White & Blue . . . The Simple, Affordable, No-Braces Treatment," Allesee Orthodontic Appliances-Pro Lab product information, 6 pages (2003).	<input type="checkbox"/>
	DS	"The Red, White & Blue Way to Improve Your Smile!" Allesee Orthodontic Appliances-Pro Lab product information for patients, 2 pages.	<input type="checkbox"/>
	DT	"You May Be A Candidate For This Invisible No-Braces Treatment," Allesee Orthodontic Appliances-Pro Lab product information for patients, 2 pages.	<input type="checkbox"/>
	DU	ANDREWS, <i>The Six Keys to Optimal Occlusion Straight Wire</i> , Chapter 3, pp 13-24.	<input type="checkbox"/>
	DV	BARTELS, et al., <i>An Introduction to Splines for Use in Computer Graphics and Geometric Modeling</i> , Morgan Kaufmann Publishers, pp. 422-425 (1987).	<input type="checkbox"/>
	DW	BIOSTAR OPEATION & TRAINING MANUAL. Great Lakes Orthodontics, Ltd. 199 Fire Tower Drive, Tonawanda, New York. 14150-5890. 20 pages total	<input type="checkbox"/>
	DX	BLU, et al., "Linear Interpolation revitalized", <i>IEEE Trans. Image Proc.</i> , 13(5):710-719 (May 2004).	<input type="checkbox"/>

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/888,261		
		Filing Date	June 21, 2001		
		First Named Inventor	NIKOLSKIY, SERGEY		
		Art Unit	2123		
		Examiner Name	Ayal I. Sharon		
Sheet	5	of	7	Attorney Docket Number	018563-003410US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	DY	BOYD <i>et al.</i> , "Three Dimensional Diagnosis and Orthodontic Treatment of Complex Malocclusions With the Invisalign Appliance," <i>Semin. Orthod.</i> , 7(4):274-293 (December 2001).	<input type="checkbox"/>	
	DZ	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Part 1)," <i>J. Clin. Orthod.</i> , 13(7):442-453 (July 1979).	<input type="checkbox"/>	
	EA	Cardinal Industrial Finishes, Powder Coatings information posted at < <a href="http://www.cardinalpaint.com">http://www.cardinalpaint.com</a> > on Aug. 25, 2000, 2 pages.	<input type="checkbox"/>	
	EB	DENT-X posted on 09/24/98 at < <a href="http://www.dent-x.com/DentSim.htm">http://www.dent-x.com/DentSim.htm</a> >, 6 pages.	<input type="checkbox"/>	
	EC	DuraClear™ product information, Allesee Orthodontic Appliances-Pro Lab, 1 page.	<input type="checkbox"/>	
	ED	English translation of Japanese Laid-Open Publication No. 63-11148 to inventor T. Ozukuri (Laid-Open on January 18, 1988) pp. 1-7.	<input type="checkbox"/>	
	EE	GOTTLIEB <i>et al.</i> , "JCO Interviews Dr. James A. McNamara, Jr., on the Frankel Appliance: Part 2: Clinical Management," <i>J. Clin. Orthod.</i> , 16(6):390-407 (June 1982).	<input type="checkbox"/>	
	EF	HIGHBEAM RESEARCH, "Simulating Stress Put on Jaw," Tooling & Production [online], November 1996, pp. 1-2, retrieved from the Internet on 11/05/2004, URL < <a href="http://static.highbeam.com/t/toolingampproduction/november011996/simulatingstressputonja...">http://static.highbeam.com/t/toolingampproduction/november011996/simulatingstressputonja...</a> >.	<input type="checkbox"/>	
	EG	HIKAGE, "Integrated Orthodontic Management System for Virtual Three-Dimensional Computer Graphic Simulation and Optical Video Image Database for Diagnosis and Treatment Planning," <i>Journal of Japan Orthodontic Society</i> , February 1987, English translation, pp. 1-38, Japanese version, 46(2), pp. 248-269 (60 pages total).	<input type="checkbox"/>	
	EH	KOCHANNEK, "Interpolating Splines with Local Tension, Continuity and Bias Control," <i>Computer Graphics</i> , 18(3):33-41 (July 1984).	<input type="checkbox"/>	
	EI	KUNII <i>et al.</i> , "Articulation Simulation for an Intelligent Dental Care System," <i>Displays</i> 15:181-188 (1994).	<input type="checkbox"/>	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/888,261		
		Filing Date	June 21, 2001		
		First Named Inventor	NIKOLSKIY, SERGEY		
		Art Unit	2123		
		Examiner Name	Ayal I. Sharon		
Sheet	6	of	7	Attorney Docket Number	018563-003410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BJ	MANETTI, <i>et al.</i> , "Computer-Aided Cefalometry and New Mechanics in Orthodontics," (Article Summary in English, article in German), <i>Fortschr. Kieferorthop.</i> 44, 370-376 (Nr. 5), 1983.	<input type="checkbox"/>
	EK	MCCANN, "Inside the ADA," <i>J. Amer. Dent. Assoc.</i> , 118:286-294 (March 1989).	<input type="checkbox"/>
	EL	MOLES, "Correcting Mild Malalignments - As Easy As One, Two, Three," <i>AOA/Pro Corner</i> , 2 pages.	<input type="checkbox"/>
	EM	PROFFIT <i>et al.</i> , <i>Contemporary Orthodontics</i> , (Second Ed.), Chapter 15, Mosby Inc., pp 470-533 (October 1993).	<input type="checkbox"/>
	EN	RAINTREE ESSIX & ARS MATERIALS, INC., Raintree Essix, Technical Magazine Table of contents and Essix Appliances, < <a href="http://www.essix.com/magazine/default.html">http://www.essix.com/magazine/default.html</a> > Aug. 13, 1997, 7 pages.	<input type="checkbox"/>
	EO	RICHMOND <i>et al.</i> , "The Development of the PAR Index (Peer Assessment Rating): Reliability and Validity," <i>Eur. J. Orthod.</i> , 14:125-139 (1992).	<input type="checkbox"/>
	EP	SCHROEDER <i>et al.</i> , Eds. <i>The Visual Toolkit</i> , Prentice Hall PTR, New Jersey (1998) Chapters 6, 8 & 9, (pages 153-210, 309-354, and 355-428, respectively).	<input type="checkbox"/>
	EQ	SINCLAIR, "The Readers' Corner," <i>J. Clin. Orthod.</i> , 26(6):369-372 (June 1992).	<input type="checkbox"/>
	ER	STURMAN, "Interactive Keyframe Animation of 3-D Articulated Models," <i>Proceedings Graphics Interface '84</i> , May-June 1984, pp. 35-40.	<input type="checkbox"/>
	ES	TRUAX L., "Truax Clasp-Less(TM) Appliance System," <i>Funct. Orthod.</i> , 9(5):22-4, 26-8 (September-October 1992).	<input type="checkbox"/>
	ET	TRU-TAIN ORTHODONTIC & DENTAL SUPPLIES, Product Brochure, Rochester, Minnesota 55902, 16 pages total.	<input type="checkbox"/>

Examiner Signature	Date Considered
--------------------	-----------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/888,261		
		Filing Date	June 21, 2001		
		First Named Inventor	NIKOLSKIY, SERGEY		
		Art Unit	2123		
		Examiner Name	Ayal I. Sharon		
Sheet	7	of	7	Attorney Docket Number	018563-003410US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	EU	WSCG'98 - Conference Program, "The Sixth International Conference in Central Europe on Computer Graphics and Visualization '98," February 9-13, 1998, pp. 1-7, retrieved from the internet on 11/05/2004, URL < <a href="http://wscg.zcu.cz/wscg98/wscg98.h">http://wscg.zcu.cz/wscg98/wscg98.h</a> >.	<input type="checkbox"/>	
	EV	YOSHII, "Research on a New Orthodontic Appliance: The Dynamic Positioner (D.P.); I. The D.P. Concept and Implementation of Transparent Silicone Resin (Orthocon)," <i>Nippon Dental Review</i> , 452:61-74 (June 1980).	<input type="checkbox"/>	
	EW	YOSHII, "Research on a New Orthodontic Appliance: The Dynamic Positioner (D.P.); II. The D.P. Manufacturing Procedure and Clinical Applications," <i>Nippon Dental Review</i> , 454:107-130 (August 1980).	<input type="checkbox"/>	
	EX	YOSHII, "Research on a New Orthodontic Appliance: The Dynamic Positioner (D.P.); III.- The General Concept of the D.P. Method and Its Therapeutic Effect, Part 2. Skeletal Reversed Occlusion Case Reports," <i>Nippon Dental Review</i> , 458:112-129 (December 1980).	<input type="checkbox"/>	
	EY	YOSHII, "Research on a New Orthodontic Appliance: The Dynamic Positioner (D.P.); III. The General Concept of the D.P. Method and Its Therapeutic Effect, Part 1. Dental and Functional Reversed Occlusion Case Reports," <i>Nippon Dental Review</i> , 457:146-164 (November 1980).	<input type="checkbox"/>	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.